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 ACCESSION NUMBER: 1991:99972 HCAPLUS Full-text
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 TITLE: Cyclosporin fermentation with Tolypocladium varium
 INVENTOR(S): Jekkel, A.; Ambrus, G.; Sarudy, E. Toth; Szabo, I.
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 Koenczoel, K.; Polya, K.; et al.
 PATENT ASSIGNEE(S): Biogal Gyogyszergyar, Hung.
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 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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FR 2640641	A1	19900622	FR 1989-16878	19891220
FR 2640641	B1	19910510		
HU 52164	A2	19900628	HU 1988-6497	19881220
HU 201577	B	19901128		
DK 8906409	A	19900621	DK 1989-6409	19891218
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SE 8904262	A	19900621	SE 1989-4262	19891219
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CA 2006144	AA	19900620	CA 1989-2006144	19891220
CA 2006144	C	19950221		
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NO 175873	C	19941221		
EP 379708	A1	19900801	EP 1989-123535	19891220
EP 379708	B1	19941207		
R: DE				
GB 2227489	A1	19900801	GB 1989-28715	19891220

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AT 8902891	A	19910115	AT 1989-2891	19891220
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PL 162959	B1	19940131	PL 1989-282876	19891220
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LV 10500	B	19950820	LV 1993-708	19930628
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PRIORITY APPLN. INFO.:

AB The immunosuppressants cyclosporins A, B, and C are manufd. by fermn. with the novel filamentous fungus *Tolypocladium varium* CY/93. A conidial inoculum propagated in a casein peptone/glucose/salts medium that was used to inoculate a trypton/glucose/urea/salts medium 5 L stirred at 1000 rpm and aerated at 300 L/h. After 96 h maltose 100 g (sterile solution) was added. After a further 144 h cyclosporin concentration in the medium was 950 µg/mL (bioassay). Recovery of cyclosporin A from 4.8 L was 2.75 g.

IT 59787-61-0P, Cyclosporin C 63775-95-1P, Cyclosporin B
 RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP
(Preparation)

(manufacture of, with *Tolypocladium varium* CY/93)

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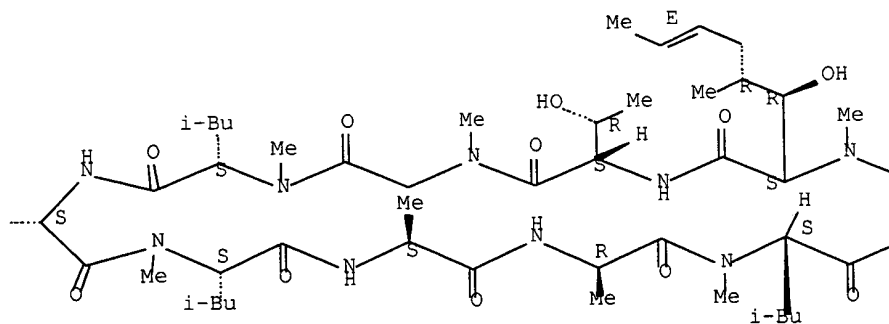
CN Cyclosporin C (9CI) (CA INDEX NAME)

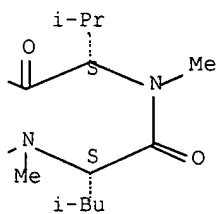
Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A

i-Pr

PAGE 1-B





RN 63775-95-1 HCAPLUS
CN Cyclosporin B (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

i-Pr

